

Predatory Pricing in the Low-Fare Airline Market: Targeted, Discriminatory, and Achieved with Impunity

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Predatory pricing claims in the airline industry have traditionally been unsuccessful under the current legal framework. Allegations of predatory pricing arise when a major airline, operating from its hub airport, responds to the entry of a low-fare airline by aggressively lowering price and adding capacity. While the major airlines' targeted response to entry often forces the exit of low-fare airlines from the market, it is done so with impunity. The major airlines have escaped censure under the antitrust laws—which require a showing that a defendant priced below its costs—by selectively accepting losses in the markets in which they compete with low-fare entrants, while cushioning these losses with high fares and hub traffic not subject to the price competition.

11 *Despite the traditional absence of legal censure, the United States Court of Appeals for the Sixth Circuit, in Spirit Airlines, Inc. v. Northwest Airlines, Inc., overturned summary judgment by the lower court and found that a jury could reasonably find that a major airline, Northwest Airlines, engaged in predatory pricing against a low-fare carrier, Spirit Airlines. This controversial decision has sparked a great deal of debate because the Sixth Circuit reached its decision by isolating the low-fare passenger market to conduct a price-cost comparison, and by relying on qualitative evidence of Northwest's "predatory intent."*

This Note provides an in depth analysis of predatory pricing claims in the airline industry, with a focus on the Sixth Circuit's Spirit decision. It addresses the issues which Spirit raises and concludes with a proposed cost standard to help distinguish predatory from competitive pricing.

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I. INTRODUCTION

Predatory pricing has been defined as pricing below an appropriate measure of cost for the purpose of eliminating a competitor.¹ The predator essentially "bites the bullet and forgoes present revenues to drive a competitor from the market. Its intent, of course, is to recoup lost revenues through higher profits when it succeeds in making the environment less competitive."² For predatory pricing to succeed as a rational investment, certain prerequisites must be met.³ The alleged below-cost predation must not continue for an indefinite period,⁴ and it must occur in a concentrated market in which the defendant has monopoly power.⁵ In addition, market barriers to entry must be sufficiently high so that the predator can rely on a stable period of monopoly returns after the "predation has done its work."⁶

In the airline industry, the classic understanding of a predatory pricing scheme involves the harmless standby fare.⁷ An airline with unsold seats may offer a deeply discounted fare to passengers because it is more profitable than leaving the seats empty.⁸ Such standby fares are not predatory because they are not intended, nor do they have the effect, of monopolizing a certain airline passenger market or displacing another airline.⁹ An airline offering

¹ See *Clamp-All Corp. v. Cast Iron Soil Pipe Inst.*, 851 F.2d 478, 483 (1st Cir. 1988).

² *Kelco Disposal, Inc. v. Browning-Ferris Indus. of Vt., Inc.*, 845 F.2d 404, 407 (2d Cir. 1988) (citing *Ne. Tel. Co. v. AT&T*, 651 F.2d 76, 85 (2d Cir. 1981)).

³ See E. THOMAS SULLIVAN & HERBERT HOVENKAMP, *ANTITRUST LAW, POLICY AND PROCEDURE: CASES, MATERIALS, PROBLEMS* 768 (5th ed. 2003).

⁴ See *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 588 (1986). In this case, the plaintiffs alleged that a number of firms conspired to charge below-market prices in order to stifle competition. The Court ruled against a finding of predatory pricing because the defendant firms had been offering low prices for several years.

⁵ See *Am. Acad. Suppliers v. Beckley-Cardy, Inc.*, 922 F.2d 1317, 1319 (7th Cir. 1991). Predatory pricing is "highly unlikely unless the defendant already has monopoly power." *Id.*

⁶ SULLIVAN & HOVENKAMP, *supra* note 3, at 768 ("[B]arriers to entry in the market must be high enough that the predator can expect a relatively stable period of monopoly returns after the predation has done its work.").

⁷ PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW*, Vol. III ¶ 740(b)(2) (2005). Professors Areeda and Hovenkamp explain that an airline standby fare represents "the classic example" of lower prices out of residual excess capacity. *Id.*

⁸ *Id.*

⁹ Predatory pricing is generally prosecuted under Section 2 of the Sherman Antitrust Act, 15 U.S.C. § 2 (2000). This Act prohibits any person "who shall monopolize, or attempt to monopolize . . . any part of the trade or commerce among the several States, or with foreign nations." *Id.* It is generally accepted that the evil that the Sherman Act condemns is not large market share, but rather the ability to charge more than a

such a standby fare is simply maximizing its revenue and utilizing its excess capacity of empty seats. In addition, these fares are generally above costs. Once an airline has purchased the plane, its fuel, and crew, the additional cost of filling an additional seat is quite minimal.¹⁰

In contrast to the harmless standby fare, there is an alternative form of predatory pricing that allegedly occurs in the low-fare airline market.¹¹ Under this scenario, a major airline, operating from its hub airport, responds to the entry of a low-fare airline by aggressively lowering price and adding capacity.¹² For instance, in a 2005 case before the Sixth Circuit, Spirit Airlines, a small low-fare airline, alleged that Northwest Airlines engaged in predatory pricing on two routes in which it and Spirit competed.¹³ In this case, Spirit established point-to-point flights from Detroit to Boston and Detroit to Philadelphia in the mid-1990s.¹⁴ These flights were geared toward price-sensitive passengers and offered no added amenities or frills.¹⁵ Spirit experienced success and achieved high "load factors."¹⁶ In response to

competitive price for the monopolized product. See SULLIVAN & HOVENKAMP, *supra* note 3, at 622. ("Market power" is the ability to raise price by reducing output."). Predatory pricing claims are brought under Section 2 of the Sherman Antitrust Act because the predator seeks to recoup its losses with monopoly profits once the competition is removed. But in the case of standby fares, the airline is merely utilizing excess capacity to increase profits. There is no evidence of an attempt to exercise market power by lowering price and increasing output.

¹⁰ AREEDA & HOVENKAMP, *supra* note 7, ¶ 740(b)(2).

¹¹ See CLINTON V. OSTER & JOHN S. STRONG, PREDATORY PRACTICES IN THE U.S. AIRLINE INDUSTRY 7 (2001).

¹² *Id.* at 6. Oster and Strong explain that by the late 1990s, the major airlines were "built around hub airports typically dominated by a single carrier. These hub-based networks established geographic areas in which each major network airline has substantial presence and market power." *Id.*

¹³ Spirit Airlines, Inc. v. Nw. Airlines, Inc., 431 F.3d 917, 924–25 (6th Cir. 2005). This case was filed on November 9, 2005. The Sixth Circuit overturned summary judgment for the defendant Northwest Airlines. This case is discussed in greater detail in the next Part of this Note. See *infra* Part II.

¹⁴ *Id.* at 922.

¹⁵ Spirit Airlines, Inc. v. Nw. Airlines, Inc., No. 00-71535, 2003 U.S. Dist. LEXIS 26831, at *4 (E.D. Mich. Mar. 31, 2003) ("[Spirit] offers only one class of service, minimal in-flight amenities, and a limited number of flights per day on a modest collection of city-pair routes."); see also Spirit, 431 F.3d at 922. Spirit commenced its single daily non-stop roundtrip flights between Detroit and Philadelphia at a \$49 fare. Spirit started its Detroit to Boston route initially at fares of \$69, \$89, and \$109. *Id.*

¹⁶ Spirit, 431 F.3d at 922. By April 1996, Spirit achieved load factors as high as eighty eight percent for its Detroit to Philadelphia route. Load factor is a "ratio measured as traffic divided by capacity." Russel A. Klingaman, *Predatory Pricing and Other Exclusionary Conduct in the Airline Industry: Is Antitrust Law the Solution?*, 4 DEPAUL BUS. L.J. 281, 287 (1992).

Spirit's success, Northwest—a large, full-service air carrier that operated its hub out of Detroit Metro Airport—dramatically reduced its fares and increased its daily non-stop flights on these two geographic routes.¹⁷ Northwest's new low-fare flights took hold, and Spirit was soon forced to exit the market.

As commentators have noted, the Spirit case was indicative of a rising trend of unfair pricing practices in the airline industry.¹⁸ Although deregulation of the airline industry in 1978 led, in large part, to lower airfares and increased competition,¹⁹ the industry soon became the “poster-boy” for

¹⁷ *Spirit*, 431 F.3d at 923–24.

¹⁸ OSTER & STRONG, *supra* note 11, at 7. Oster and Strong explain that “in recent years, some of the incumbent network carriers’ responses to entry by low-fare carriers have given rise to concerns about the use of what might be termed predatory practices or unfair methods of competition.” *Id.* However, since 2001, the major airlines have struggled financially while the low-fare carriers have gained in market power. See Charles E. Mueller, *Foreword: Beginning of the End of Monopoly in the U.S. Airline Industry?*, Vol. 33, No. 1, ANTITRUST L. & ECON. REV. 1, 7 (2006). In his 2006 article, Charles Mueller notes: “All 6 major airlines are suffering at once. U.S. Airways, Delta, and United are stumbling like dinosaurs in a tar pit, and American, Continental, and Northwest need only one big setback to push them in.” *Id.* Meanwhile, the low-fare carriers have increased their market share from “5% a decade ago, [but] they’re now up to roughly 30% and are expected to reach 40% shortly.” *Id.* This reversal in trends, due in part to the events of September 11, 2001, has caused a reduction in anti-competitive tactics in the airline industry. Rather than attempting to drive low-fare carriers from the market, the “giants are busily declaring that they’re remaking themselves into the model of the discounters—Southwest, Jet Blue—and thus promising a new airline industry that’s the very opposite of what it’s been before.” *Id.* at 4. Therefore, while this Note addresses alleged predatory practices by the major airlines, it is important to keep in mind that these unfair practices have dramatically dropped off as a consequence of the major airlines’ financial troubles.

With that said, the debate over the major airlines’ alleged predatory tactics continues on, due in part to the controversial *Spirit* opinion issued by the Sixth Circuit in 2005. See *supra* note 13 and *infra* Part II. In addition, with a temporary lull in predatory behavior, it is useful to analyze past cases of alleged predation—and the corresponding legal doctrine under which these cases are judged—to prepare for a potential spike of anti-competitive tactics in the future. The major airlines, upon regaining their financial footing, may return to predatory practices, and as Charles Mueller points out, successful low-fare carriers, such as Southwest, may become “the new monopolist[s]” in future years. Mueller, *supra*, at 9. For example, Southwest has aggressively purchased gates at Chicago Midway and will “routinely raise[] its price after the departure of the competition.” *Id.*

¹⁹ U.S. GEN. ACCOUNTING OFFICE, AVIATION COMPETITION: INFORMATION ON THE DEPARTMENT OF TRANSPORTATION’S PROPOSED POLICY 2 (July 1999) [hereinafter GAO, AVIATION COMPETITION REPORT]. Deregulation, according to the GAO “has led to lower airfares and better service for most air travelers, largely because of increased competition spurred by the entry of new airlines into the industry and of established carriers into new markets.” *Id.*

anti-competitive tactics.²⁰ Despite an initial upsurge of new airline entrants in the early 1990s, not a single airline began service from 1995 until early 1999.²¹ Indeed, by 1999 new entrants accounted for only 1.3% of the total airline market.²² This dramatic drop-off in route entry in the late 1990s produced a host of predatory pricing complaints. The Department of Transportation received thirty-two informal complaints about unfair competitive practices between 1993 and 1999.²³ And, as professor Paul Dempsey observes, there were a slew of notable examples in which the major airlines targeted low-fare entrants. As he notes:

United[] allegedly targeted Frontier and Western Pacific. American allegedly set its sights on Vanguard, Western Pacific, and Sun Jet International. Delta allegedly targeted ValuJet. Northwest allegedly targeted Sun Country and Spirit Airlines. By 2002, Western Pacific, Vanguard, Sun Jet International, Sun Country and Spirit had either been driven from the market or driven into bankruptcy.²⁴

Yet despite the “strong odor of predation”²⁵ in the airline industry, predatory pricing claims are tenuous under the current legal framework.²⁶ Major hub airlines can limit price-matching to the price-sensitive markets where they face competition, while remaining profitable by combining passengers from various routes and cushioning losses with hub traffic not

²⁰ Mueller, *supra* note 18, at 2. Mueller notes that the country’s airline giants—American, United, Delta, Northwest, Continental, U.S. Airways—“killed some 130 new airlines since 1978, most of them more-efficient discounters.” *Id.* at 11.

²¹ Paul S. Dempsey, *Predation, Competition & Antitrust Law: Turbulence in the Airline Industry*, 67 J. AIR L. & COM. 685, 688 (2002).

²² *Id.*

²³ OSTER & STRONG, *supra* note 11, at 10 n.8; *see also* GAO, AVIATION COMPETITION REPORT, *supra* note 19, at 5. Of the thirty-two complaints the Department of Transportation received, seventeen dealt with new entrant airlines’ concerns about unfair pricing and capacity increases by the major airlines. The remaining complaints dealt with access to gates, display biases in the computerized reservation systems that benefit major airlines, and the unfair use of travel agent commissions.

²⁴ Dempsey, *supra* note 21, at 689.

²⁵ William J. Baumol, *Predation and the Logic of the Average Variable Cost Test*, 39 J.L. & ECON. 49, 52 (1996) (“[T]here are a number of instances in which the odor of predation is strong, as when an entrant airline . . . proposes to fly a route coveted by a large incumbent airline.”).

²⁶ *See* Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 223–24 (1993). The Supreme Court set out a two-part test that a plaintiff must satisfy to succeed on a predatory pricing claim. The plaintiff must show that the defendant priced below cost and had a “dangerous probability” of recouping its losses; *See also* Aaron S. Edlin, *Stopping Above-Cost Predatory Pricing*, 111 YALE L.J. 941, 943 (2002). For further discussion of this below-cost test, *see infra* text accompanying notes 42–43.

subject to the new price competition.²⁷ Thus, the major airlines can avoid censure under the antitrust laws by pricing above-cost on the route as a whole, while at the same time pricing low enough on certain passenger markets to force the exit of a low-fare entrant. This targeted response has sparked a great deal of frustration and provoked some commentators to call for a complete reexamination of the predatory pricing doctrine.

This Note addresses predatory pricing in the airline industry and proposes a cost-based standard for evaluating a major airline's targeted response to a low-fare entrant.²⁸ Part II addresses issues raised in the *Spirit Airlines v. Northwest Airlines* case as a tool for understanding predatory pricing in the low-fare airline market. Part III explores two classes of predatory pricing claims in the airline industry: the targeted response to entry and the discounted standby fare. In particular, Part III shows that the law has not developed an adequate policy for evaluating the targeted response to entry. Part IV considers two main proposals for altering the predatory pricing doctrine. These proposals include qualitative assessments of predatory intent as well as mandated price freezes in response to entry. The final substantive section, Part V, recommends a cost standard for evaluating predatory pricing in the low-fare airline market. In short, this Note proposes a standard that will distinguish predatory from competitive pricing by focusing on a major airline's addition of capacity in response to the entry of a low-fare carrier.

²⁷ Michael E. Levine, *Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy*, 4 YALE J. ON REG. 393, 451 (1987). For further discussion of price matching and the airlines' complex fare structure, see *infra* Part III.B.1, 2.

²⁸ This Note focuses on a legal analysis that addresses predatory pricing allegations under the framework of the antitrust laws. It is important to note, however, that the legal process is not the sole means of addressing predatory pricing concerns. Rather, the Department of Transportation (DOT) has proposed policies and enforcement mechanisms for combating anti-competitive practices in the airline industry. See DOT, Enforcement Policy Regarding Unfair Exclusionary Conduct in the Air Transportation Industry, Docket OST-98-3713, at 61 (Jan. 17, 2001). The Department first proposed enforcement guidelines in 1998, whereby the Department would consider taking enforcement action in cases where a major airline's response appeared to be motivated primarily by the goal of forcing the exit of a low-fare airline. *Id.* at 2. The Department reiterated its commitment to an enforcement policy in its 2001 report. *Id.* at 1-2. Importantly, the Department's proposed enforcement policy would not be constrained by the restrictive legal standards set out in the antitrust laws. *Id.* at 71-72. Namely, the Department could sanction anti-competitive behavior even when the defendant airline was pricing above its cost. *Id.*; see also Hon. Rodney E. Slater, *How Antitrust Failed in America: The Sad Case of Predatory Pricing in the U.S. Airline Industry (IV)*, Vol. 33, No. 2 ANTITRUST L. & ECON. REV. 61 (2006) (emphasizing the important role the Department should play in deterring anti-competitive practices in the airline industry).

II. THE *Spirit* CASE: A MODEL FOR UNDERSTANDING PREDATORY PRICING IN THE LOW-FARE AIRLINE MARKET

The *Spirit* case provides a useful insight into the nature of predatory pricing claims in the low-fare airline market. Spirit filed its complaint against Northwest under Section 2 of the Sherman Antitrust Act,²⁹ and alleged, in pertinent part that: "Northwest targeted certain of the routes on which it and Spirit competed and substantially increased capacity and began pricing below Northwest's average variable cost."³⁰ The Sixth Circuit overturned the district court and denied Northwest's motion for summary judgment on the ground that a jury could reasonably find that Northwest engaged in predatory pricing.³¹

This section addresses the various issues raised in the *Spirit* case. It first provides a brief overview of Northwest's targeted response to Spirit's entry. It then discusses Spirit's claim of predatory pricing. In particular, there is a focus on Spirit's request that the court only consider a portion of Northwest's passenger revenue in deciding whether Northwest priced below its costs. The purpose of this section is not to propose a particular solution for resolving the *Spirit* case, but rather to frame the issues and to invite further investigation into predatory pricing claims in the airline industry.

A. Northwest's Response: A Pattern of Predation

By all accounts, Northwest's conduct follows a classic pattern of predatory pricing. The pattern of successful predation is well known: a "single firm, having a dominant share of the relevant market, cuts its prices in order to force competitors out of the market, or perhaps to deter potential entrants from coming in."³²

²⁹ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 924–25 (6th Cir. 2005); Section 2 of the Sherman Antitrust Act prohibits any person who "shall monopolize, or attempt to monopolize . . . any part of the trade or commerce among the several States, or with foreign nations." Sherman Antitrust Act, 15 U.S.C. § 2 (2000).

³⁰ *Spirit*, 431 F.3d at 924 (emphasis omitted).

³¹ The United States District Court for the Eastern District of Michigan granted summary judgment on March 31, 2003. *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, No. 00-71535, 2003 U.S. Dist. LEXIS 26831 (E.D. Mich. Mar. 31, 2003) The United States Court of Appeals for the Sixth Circuit filed its decision overturning summary judgment on November 9, 2005. *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 429 F.3d 190 (6th Cir. 2005) *withdrawn and superseded by* *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917 (6th Cir. 2005)).

³² *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 584 n.8 (1986). The United States Court of Appeals for the Eighth Circuit described a similar pattern of

In this case, the magnitude and scope of Northwest's response is rather stark. On the Boston route, Northwest was the only carrier prior to Spirit that provided non-stop service.³³ Northwest held an 89% market share on this route and offered an average of 8.5 flights per day with a lowest unrestricted fare of \$411.³⁴ In response to Spirit's entry, however, Northwest sharply reduced its fares and added capacity to accommodate more low-fare passengers. Northwest dropped its lowest fare to \$69, increased its daily non-stop flights on the route from 8.5 to 10.5, and added a 289-seat DC-10 airplane that had triple Spirit's entire daily capacity.³⁵ As a consequence, Spirit's load factors plummeted and it was eventually forced to exit the market.³⁶

On the Detroit to Philadelphia route, Northwest's only competitor on this route prior to Spirit was United Airways, which was described as a "compliant" competitor.³⁷ Northwest held a 72% market share on this route and its lowest unrestricted fare was \$355.³⁸ But once Spirit entered and began achieving high load factors, Northwest dramatically reduced fares and increased capacity. Northwest reduced its lowest unrestricted fares from \$355 to \$49 on all flights for this route.³⁹ In addition, it added another flight to the route and dramatically increased its number of low-fare passenger seats.⁴⁰ Spirit soon left the market, and in response, Northwest increased its lowest unrestricted fare from \$49 to \$271 and later to \$461.⁴¹

Yet despite the predatory pattern in this case, Spirit's claim of predatory pricing is difficult to prove under the current legal framework. Spirit must

"price cuts and lower profits followed by higher prices and higher profits once the competition is gone." *Morgan v. Ponder*, 892 F.2d 1355, 1359 (8th Cir. 1989).

³³ *Spirit*, 431 F.3d at 923.

³⁴ *Id.* Prior to Spirit's entry into the Detroit to Boston route, Northwest's lowest unrestricted fare was \$411 and its lowest restricted fare was \$189 each way.

³⁵ *Id.* at 923-24.

³⁶ *Id.* at 924. On this route, Northwest's passenger fares were less than Spirit's lowest fares on 93.9% of the days during which Spirit flew this route. As a consequence, Spirit's monthly average load factors on the Detroit to Boston route dropped significantly.

³⁷ *Id.* at 923.

³⁸ *Id.*

³⁹ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 924 (6th Cir. 2005).

⁴⁰ *Id.* at 922; *see also* OSTER & STRONG, *supra* note 11, at 8-10. In the first quarter of 1996, Northwest, in the Detroit to Philadelphia market, carried almost 32,000 passengers, but only 1220 of those passengers flew at fares between \$50 and \$75. In the second quarter, Northwest's traffic increased 36% to 43,520, but its traffic in the \$50 to \$75 fare class increased only 11% to 1360. In the third quarter, Northwest—in response to Spirit's entry—sold 49,760 seats in the \$50 to \$75 fare category (an increase of 48,400 seats).

⁴¹ *Spirit*, 431 F.3d at 924.

show that Northwest priced below its cost on these routes with the expectation of later recouping its losses with monopoly profits.

B. The Legal Test: Below-Cost Pricing with the Dangerous Probability of Recoupment

The law governing claims of predatory pricing entails a two-part test set out by the United States Supreme Court in *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*⁴² Under this test, a plaintiff must prove (1) “that the prices complained of are below an appropriate measure of its rival’s costs,” and (2) the defendant had a “dangerous probability of recouping its investment in below-cost prices.”⁴³

The first part of the *Brooke Group* test—below-cost pricing—is the only disputed issue in the *Spirit* case because it is clear that Northwest had a dangerous probability of recouping its investment in predatory pricing.⁴⁴ Northwest had substantial market power in a highly concentrated market in which there were high entry barriers.⁴⁵ As discussed, Northwest had a monopoly position on the two geographic routes with little to no competition. Northwest also had a virtual stranglehold on access to gates at the Detroit Airport, controlling sixty-four of Detroit’s seventy-eight gates under a long-term lease.⁴⁶ Due to its monopoly power in the market and high barriers to entry, Northwest had ample time to recoup its investment: upon Spirit’s exit, Northwest enjoyed nineteen months of monopoly pricing before another entrant arrived.⁴⁷ Therefore, because Northwest had a reasonable prospect of recouping its losses, the critical question is whether Northwest engaged in below-cost pricing.

⁴² 509 U.S. 209, 222–24 (1993).

⁴³ *Id.*

⁴⁴ See *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, No. 00-71535, 2003 U.S. Dist. LEXIS 26831, at *2 (E.D. Mich. Mar. 31, 2003). The district court held that the case “focuses primarily upon the first prong of the Brooke Group inquiry” under which Spirit must show that Northwest’s fares were below costs. *Id.*

⁴⁵ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 922 (6th Cir. 2005). At the time of Spirit’s entry, Northwest carried 78% of all passengers traveling from the Detroit Metro Airport. *Id.* at 923.

⁴⁶ *Id.* at 947. One Northwest executive testified that these leases created a “very high” barrier to entry.

⁴⁷ *Id.* at 950. The only significant entry since Spirit withdrew from the market occurred in May 1998 when Pro Air introduced service between Detroit and Philadelphia. Thus, nineteen months elapsed between Spirit’s withdrawal and Pro Air’s entry.

1. *Below-Cost Pricing*

A plaintiff seeking to establish competitive injury resulting from a rival's low prices "must prove that the prices complained of are below an appropriate measure of its rival's costs."⁴⁸ Professors Areeda and Turner were the first to propose a cost-based test as a means of establishing a restrictive definition of unlawful predatory prices.⁴⁹ In their seminal law review article, they argued that prices below reasonably anticipated short-run marginal cost should be deemed unlawful, while prices above that level should be deemed lawful.⁵⁰ Marginal cost is the "increment to total cost that results from producing an additional increment of output."⁵¹ However, because marginal costs can be difficult to measure in most circumstances, Areeda and Turner used average variable cost (AVC) as a surrogate.⁵² AVC is the sum of variable costs divided by the number of units produced.⁵³ Variable costs are costs that vary with changes in output.⁵⁴ The other type of cost is a fixed cost, which does not vary with output.⁵⁵

The Areeda-Turner test set the benchmark for evaluating predatory pricing complaints.⁵⁶ Although the United States Supreme Court and the federal circuit courts have not embraced any particular cost-based test,⁵⁷ there is general agreement that a plaintiff must prove that the prices complained of are below some appropriate measure of its rival's costs.⁵⁸

⁴⁸ *Brooke*, 509 U.S. at 222; see also *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 584 n.8 (1986) ("[P]redatory pricing' means pricing below some appropriate measure of cost.").

⁴⁹ Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697, 711 (1975).

⁵⁰ *Id.*

⁵¹ *Id.* at 700.

⁵² *Id.* at 716. Areeda and Turner explained that marginal costs can be difficult to measure because the "incremental cost of making and selling the last unit cannot readily be inferred from conventional business accounts, which typically go no further than showing observed average variable cost." *Id.*

⁵³ HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* 342 (3d ed. 2005). To calculate AVC, a fact-finder must "identify which costs are variable, add them up, and divide by the number of units produced." *Id.*

⁵⁴ Areeda & Turner, *supra* note 49, at 700.

⁵⁵ *Id.*

⁵⁶ See HOVENKAMP, *supra* note 53, at 342. ("Many courts initially adopted the Areeda-Turner test with little qualification.").

⁵⁷ See Klingaman, *supra* note 16, at 299. For a discussion of the varying price-cost tests in the circuit courts, see *infra* note 150.

⁵⁸ As noted, the United States Supreme Court in *Brooke Group Ltd. v. Williamson Tobacco Corp.*, 509 U.S. 209 (1993), held that a plaintiff must prove that prices are

a. *Determining Average Variable Cost (AVC)*

In this case, both Spirit and Northwest conducted objective cost assessments. There was no significant debate concerning the appropriate cost test⁵⁹ because both sides agreed to use an AVC test. Each side considered “the total variable costs that Northwest incurs serving that city pair during a given time period” and divided that sum by the number of passengers traveling on the two routes.⁶⁰ Total variable costs include the costs of operating existing flights on the two city-pair routes,⁶¹ as well as the additional costs of adding new flights to each of the routes.⁶²

To determine costs, each side used the Flight Profitability System (FPS) published by Northwest, which specifically distinguishes fixed and variable costs.⁶³ They first excluded fixed costs from the formulation, including general overhead, taxes, and equipment costs.⁶⁴ To calculate total variable costs, the experts from both sides considered two types of costs: flight variable costs and passenger variable costs.⁶⁵ Flight variable costs constitute the bulk of variable costs, and include the costs of fuel, pilots, servicing the plane, and flight attendants.⁶⁶ Passenger variable costs include the minimal costs of serving individual passengers, such as processing tickets, in-flight meals, and baggage service.⁶⁷

Therefore, because both sides agreed to use the same cost estimates provided in the FPS, there was general agreement about Northwest’s average

“below an appropriate measure of its rival’s costs.” See *supra* note 43 and accompanying text.

⁵⁹ Cf. *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, No. 00-71535, 2003 U.S. Dist. LEXIS 26831, at *42 (E.D. Mich. Mar. 31, 2003). Although both sides agreed that AVC should be the relevant measure of cost, Spirit apparently made an eleventh hour appeal to replace AVC with average total cost. This appeal was unsuccessful.

⁶⁰ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 939 (6th Cir. 2005).

⁶¹ *Id.* at 954. The costs of operating an existing route—pilots, flight attendants, fuel to fly the plane—are still treated as variable costs because the airline “could avoid incurring all of them by exiting the route and redeploying the plane to an alternative route.” *Id.*

⁶² *Id.* at 940.

⁶³ *Id.* at 939. Northwest’s FPS collects the monthly revenues and costs of each Northwest flight and then aggregates those numbers to determine the profitability of each hub and relevant spoke.

⁶⁴ See SULLIVAN & HOVENKAMP, *supra* note 3, at 781. Fixed costs include the cost of the plant, property taxes, and most kinds of equipment. These costs are sunk and cannot be avoided by simply reducing output.

⁶⁵ *Spirit*, 431 F.3d at 940.

⁶⁶ *Id.*

⁶⁷ *Id.*

variable costs (AVC) for the Detroit to Boston and Detroit to Philadelphia routes.⁶⁸ However, the two sides reached different conclusions because they considered different passenger segments.

b. Defining the Relevant Passenger Market

To prove that Northwest priced below its cost, Spirit must establish the relevant market in which the alleged predation occurred.⁶⁹ “The definition of the relevant market has two components—a product market and a geographic market.”⁷⁰ In this case, both sides agree on the relevant geographic market, which is the two city-pair routes of Detroit to Philadelphia and Detroit to Boston.⁷¹ However, the two sides disagree on the definition of the relevant product (or passenger) market.

Spirit contends that the relevant product market should include only those passengers that traveled with Northwest at “low fares.”⁷² Specifically, rather than considering all of the Northwest passengers who traveled on the Detroit-Philadelphia and Detroit-Boston routes, Spirit’s experts considered only a subset of Northwest’s passengers: the low-fare passengers.⁷³ Spirit

⁶⁸ *But see id.* at 942. Northwest’s expert included several of the same cost elements as Spirit’s expert, but he declined to use the commercial lease rate for the aircraft and instead chose “the opportunity costs of the aircraft and its least attractive alternative deployment within the airline’s system.” *Id.*

⁶⁹ *See Bathke v. Casey’s Gen. Stores*, 64 F.3d 340, 344 (8th Cir. 1995) (“[I]t has long been clear that plaintiffs asserting claims of monopolization in violation of section 2 of the Sherman Act were required to prove the relevant . . . market.”).

⁷⁰ *Id.* at 345.

⁷¹ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 933 (6th Cir. 2005) (“[A]t its most basic level, the unit of output of a passenger airline is transportation of passengers between cities. The airline industry is a multiple-product industry producing and selling thousands of different product-travel between city pairs . . . It is at the route level, after all, that airlines actually compete with one another.” (internal references omitted) (second alteration in original)).

⁷² *Id.* at 925.

⁷³ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, No. 00-71535, 2003 U.S. Dist. LEXIS 26831, at *54–56 (E.D. Mich. Mar. 31, 2003). To accomplish the task of separating out high-fare from low-fare passengers, Spirit’s experts analyzed Northwest’s fare structure which they contend is “bimodal” in nature:

In the DTW-BOS market, for example, Dr. Elzinga [Spirit’s expert] views Northwest’s fares in the period immediately prior to its alleged predation as falling largely into two clusters, one ranging roughly from \$80 to \$200, and the other ranging approximately from \$340 to \$460. Two-thirds of Northwest’s passengers paid fares in the lower range, while one-third paid fares in the higher cluster. Dr. Elzinga opines that this bimodal structure is suggestive of more than one product market because, if only one market existed, economic theory holds that the price differential between the two fare clusters would disappear. He designates the

maintains that revenues from Northwest's flights should be limited to the low-fare passengers because those were the passengers Northwest "sought to divert from Spirit."⁷⁴ Therefore, when conducting its price-cost analysis, Spirit's experts showed that Northwest's low-fare passengers, on average, flew at prices below AVC.⁷⁵

In contrast, Northwest asserts that the relevant passenger market should include all passengers, including high-fare connecting passengers, who contribute to the total revenue on the two city-pair routes.⁷⁶ Accordingly, Northwest was able to show that the entire passenger segment, on average, flew at prices above AVC.⁷⁷ Northwest argues that all passengers should be considered because it decided to fly these routes based on whether the total route would be profitable, and not on whether the passenger segment in which it competed with Spirit would prove profitable.⁷⁸

passengers in the lower-fare cluster as "price-sensitive," while the passengers who paid the higher fares are deemed "price-insensitive."

Id. at *55–56.

⁷⁴ *Spirit*, 431 F.3d at 943.

⁷⁵ *Id.* at 940–41. Spirit's experts found in sum: (1) On the Detroit to Boston route, Northwest's \$69 fare generated per passenger net revenue of \$61.98 after deducting commissions and adding certain other ancillary revenues. This per passenger net revenue was \$10.75 below Northwest's average variable cost. This includes the time period from April through September 1996, in which 74.5% of Northwest's Detroit to Boston passengers traveled on fares of \$69 or less. (2) On the Detroit to Philadelphia route, Northwest's \$49 fare generated per passenger net revenue of \$44.29 after deducting commissions and adding certain other ancillary revenues. This per passenger net revenue was \$11.86 below Northwest's average variable cost. This includes the time period from July through September 1996, in which 40.5% of Northwest's Detroit to Philadelphia passengers traveled on fares of \$49 or less. In addition, in September 1996, 70% of Northwest's Detroit to Philadelphia passengers traveled on fares above \$49 but equal to or below \$69. The \$69 fare in September 1996 generated average net revenue of \$58.31, which was \$1.86 below its average variable cost of serving Detroit to Philadelphia in that month.

⁷⁶ *Id.* at 943. Professor Ordoover (Northwest's expert) criticized Dr. Kaplan's (Spirit's expert) segmentation of the product market on these routes "because all passengers, including connecting passengers, contribute to the revenue of the flight as part of the hub network." *Id.*

⁷⁷ *Id.* at 943.

⁷⁸ See *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, No. 00-71535, 2003 U.S. Dist. LEXIS 26831, at *74 (E.D. Mich. Mar. 31, 2003). The district court also noted that the "'area of effective competition' between the [two airlines] is somewhat more complex than Spirit's 'lowest fare' or 'price sensitive' analysis might suggest." *Id.* Spirit did not offer a single low fare on the two city-pair routes. Instead, they charged a number of different fares, which ranged from \$69 to \$159 on the Detroit to Boston route, and from \$49 to \$139 on the Detroit to Philadelphia route. Thus, while Spirit's fares may fall

c. *Allocating Common Costs*

Though Spirit may be correct in asserting that a distinct low-fare passenger market exists,⁷⁹ there remains the challenge of allocating common costs to a segmented revenue source. Typically, the courts have evaluated predatory pricing claims in the airline industry by comparing total onboard passenger revenues on a route against the total variable costs of operating that route.⁸⁰ However, Spirit is asking the court to consider only the low-fare portion of Northwest's passenger revenues. This raises a cost allocation problem because it is not clear how to allocate common airline expenses to a specific portion of passenger revenues.

To conduct a price-cost comparison, experts from both sides had to compare average variable costs against passenger revenue. Spirit's experts, who were considering only the low-fare portion of Northwest's passenger revenue, did not similarly segment a portion of the common variable costs. This meant that the "low-fare" revenue was not specifically linked to any "low-fare" costs.⁸¹ Spirit's experts explained that their uneven price-cost comparison was justified because Northwest filled its flights primarily with low-fare passengers during the alleged predation period.⁸² During the predatory campaign, low-fare passengers on Northwest's flights constituted around seventy-five percent of the passenger load on the Detroit to Boston route, and around seventy percent for the Detroit to Philadelphia route.⁸³ Thus, the experts concluded that it was appropriate to attribute the entire

within a general low-fare cluster, they arguably do not provide an adequate basis to draw a uniform low-fare comparison.

⁷⁹ See *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962). The Supreme Court has emphasized that a product market may have submarkets: "The boundaries of . . . a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors." *Id.* (quoted in *Spirit*, 431 F.3d at 933).

⁸⁰ See, e.g., *Int'l Travel Arrangers v. NWA, Inc.*, 991 F.2d 1389, 1394 (8th Cir. 1993). The plaintiff has the burden of showing that the "overall pricing structure" in the relevant market is below cost; see also *United States v. AMR Corp.*, 335 F.3d 1109, 1120 (10th Cir. 2003). The plaintiff in this case could not succeed on its predatory pricing claim because it is "uncontested that [the defendant] did not price below AVC for any route as a whole." *Id.* (emphasis added). For a further discussion of these cases and their price-cost comparison, see *infra* Part III. A.3, B.3.

⁸¹ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 944 (6th Cir. 2005). Spirit's cost analysis included "cost measures that were not specifically linked to price-sensitive passengers, but common to all passengers." *Id.*

⁸² *Id.*

⁸³ *Id.* at 923-24.

costs of the flight to this low-fare segment.⁸⁴ The costs of carrying a few high-fare passengers on the routes were minimal and should not offset a finding of below-cost pricing.

Northwest responded that comparing a segment of passenger revenues against the whole of passenger costs does not provide a suitable foundation for concluding that Northwest engaged in below-cost pricing.⁸⁵ As the district court explained, such a cost analysis amounted to an “apples-to-oranges” comparison in which a portion of the revenues were considered, but not a portion of the costs.⁸⁶ Instead, the district court concluded that an alleged predator’s prices and costs must be measured in the relevant market in its entirety, and under the terms by which the firm actually competes in the market.⁸⁷

C. Spirit Conclusion: A Problem of Measuring Predation on Only a Portion of a Firm’s Large Grouping of Sales

The issues raised in the *Spirit* case provide a helpful insight into the nature of predatory pricing in the low-fare airline market. The two central issues raised in the *Spirit* case are (1) whether it is appropriate to separate out a distinct low-fare market on Northwest’s flights, and (2) how to allocate common costs to this segmented product market, if it does exist.

Spirit’s price-cost comparison reveals the difficulty in assessing predatory pricing claims against multi-product firms. As Professor Hovenkamp explains, it would be easy if multi-product firms produced multiple products in separate facilities.⁸⁸ To illustrate this point, Professor Hovenkamp proposes an example in which a “firm makes televisions, toasters and disposal diapers in three different plants and that there are very

⁸⁴ *Id.* at 935.

⁸⁵ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, No. 00-71535, 2003 U.S. Dist. LEXIS 26831, at *61 (E.D. Mich. Mar. 31, 2003). (“[I]f it is appropriate to consider a ‘price-sensitive’ or ‘lowest-fare’ market, it surely follows that the revenues from this market must be compared solely to the costs in *this same market*.”).

⁸⁶ *Id.* at *63–64 (“Spirit’s apples-to-oranges comparison of a *segment* of passenger revenues against the *whole* of passenger costs does not provide a suitable foundation upon which . . . [to] conclude that Northwest engaged in below-cost pricing.”); *see also* *Morgan v. Ponder*, 892 F.2d 1355, 1362 n.17 (8th Cir. 1989). In *Morgan*, the court rejected the plaintiff’s cost allocation because it “seek[s] the best of both worlds.” *Id.* The plaintiff wanted to single out individual advertisements within a newspaper and compare that item to operations as a whole.

⁸⁷ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, No. 00-71535, 2003 U.S. Dist. LEXIS 26831, at *63–64 (E.D. Mich. Mar. 31, 2003).

⁸⁸ HOVENKAMP, *supra* note 53, at 362.

few common costs.”⁸⁹ This example does not pose any major cost allocation problems and it would be possible for a fact-finder to precisely evaluate predatory pricing claims in one product alone.⁹⁰ The same is true of the airline industry. If Northwest had separated its “multiple products”—multi-fare passengers—into separate planes, it would be relatively simple to conduct a price-cost comparison. For instance, if Northwest had created a separate line of flights for low-fare passengers exclusively, a fact-finder could simply measure the low-fare revenue against the cost of operating these flights.

Yet despite the cost allocation problems rooted in predatory pricing claims against multi-product firms, it is an economic reality that most firms sell multiple products in the same facility with shared common costs.⁹¹ Indeed, most major airlines sell tickets at different fares for the same flight.⁹² An airline’s multi-layered fare structure typically promotes greater competition among the airlines for different segments of the passenger market.⁹³ Thus, combining multi-fare passengers on the same flight is not considered to be a predatory tactic. However, as the next section points out, a major airline’s campaign to divert low-fare passengers away from an entrant may require a different set of economic assumptions.

III. COMPETING CLAIMS OF PREDATORY PRICING: THE DISCOUNTED STANDBY FARE VS. TARGETED RESPONSE TO ENTRY

The *Spirit* case provides a valuable backdrop for a more general evaluation of predatory pricing claims in the airline industry. *Spirit* represents one class of predatory pricing claims, which can be classified as a “targeted response to entry.” This occurs when a major hub airline engages in a deliberate campaign to divert passengers away from a low-fare entrant by making more seats available at lower prices. This class of airline predation can be distinguished from another class of predatory pricing claims: “the discounted standby fare.” As noted earlier, airlines offer standby fares to “top-up” a flight with weak demand and to fill empty seats.⁹⁴

⁸⁹ *Id.*

⁹⁰ *Id.* The production of separate products in separate facilities does not involve significant common costs.

⁹¹ See Baumol, *supra* note 25, at 59. Baumol notes that “[o]utside a textbook, there probably exists no such thing as a single-product firm.” *Id.*; see also ALFRED E. KAHN, THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS 78 (1970) (“[M]ost services are typically provided in combinations, using the same facilities.”).

⁹² OSTER & STRONG, *supra* note 11, at 14 n.14. Most airlines sell many different fares for the same flight. Each fare category is known as a “bucket.” *Id.*

⁹³ *Id.*

⁹⁴ Levine, *supra* note 27, at 449.

This section analyzes the two classes of predatory pricing claims by considering their economic rationales and treatment under the law. The evidence shows that despite the divergent economic assumptions underlying these two classes of claims, the law has not developed an adequate policy for evaluating the targeted response to entry.

A. *The Discounted Standby Fare*

The standby fare is considered by many antitrust scholars to be a classic example of why some seemingly below-cost prices are not in fact predatory.⁹⁵ These sharply discounted fares are exempt from antitrust liability because they cover their incremental passenger variable cost.⁹⁶ Once an airline has committed to flying a certain route and has sunk the bulk of its major flight variable costs—including the plane, its fuel, and crew—the cost of serving one additional passenger is negligible.⁹⁷ The standby fare must simply cover its passenger variable cost, which includes processing the ticket, in-flight meals, incremental fuel, etc.⁹⁸ As Professors Areeda and Hovenkamp remark, “the seat is going out anyway, full or empty, and any price above the cost of serving the additional passenger will make the additional sale profitable.”⁹⁹

1. *The Economic Rationale of Standby Fares: Utilizing Excess Capacity to Maximize Profits*

The standby fare reflects the guiding economic principle underlying airline pricing: yield management.¹⁰⁰ Major airlines utilize a yield management policy to price discriminate according to demand elasticity and

⁹⁵ See AREEDA & HOVENKAMP, *supra* note 7, ¶ 740(b)(2). Professors Areeda and Hovenkamp state in their antitrust treatise that the standby fare is a case where “capacity is [in] excess . . . [and so] a firm’s prices may seem lower than average variable cost.” *Id.*

⁹⁶ *Id.*

⁹⁷ KAHN, *supra* note 91, at 75 (“The level of incremental cost per unit depends . . . on the size of the increment. Consider the passenger airplane flight already scheduled, with the plane on the runway, fueled up and ready to depart, but with its seats not completely filled. The incremental unit of service in this case might be defined as the carrying of an extra passenger on that flight—in which case, the marginal cost would be practically zero.”).

⁹⁸ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 940 (6th Cir. 2005).

⁹⁹ AREEDA & HOVENKAMP, *supra* note 7, ¶ 742(c)(2).

¹⁰⁰ See Klingaman, *supra* note 16, at 287. Modern yield management emerged after deregulation in the late 1970’s. All major airlines utilize a yield management policy, including Northwest Airlines. See *Spirit*, 431 F.3d at 923.

to "try to sell every seat at its highest possible fare."¹⁰¹ With passenger demand varying "flight by flight, day by day, and season by season," airlines use computerized inventory controls to fence out high-demand passengers who want flexibility and choice from those leisure passengers desiring lower fares.¹⁰² For passengers most willing to pay for flexibility (e.g., business travelers), an airline will charge a high fare. For passengers less willing to pay for flexibility (e.g., leisure travelers), the airline will charge lower fares.¹⁰³ In either case, the major airlines are pursuing both top-of-the-market business traffic and bottom-of-the-market leisure traffic on the same flight.¹⁰⁴

The prevalence of a yield management policy explains why airlines offer standby fares for flights with weak demand. The standby discount aligns with an airline's overall policy of maximizing revenue and selling each seat at its highest possible fare.¹⁰⁵

2. The Law's Treatment of Standby Fares: Legal Because It Is Priced Above Short-Run Marginal Cost

The standby fare is considered non-predatory because it is generally priced above short-run marginal cost.¹⁰⁶ As noted, this fare covers the marginal costs of serving one additional person.¹⁰⁷ The standby fare is legal despite the fact that it is typically priced below average variable cost (AVC).¹⁰⁸ The AVC test does not serve as the appropriate benchmark in this circumstance because it would require airlines to price empty seats at restrictively high prices. There is minimal demand for these seats and a law requiring airlines to sell all seats at a price that covers AVC would inevitably force firms to forgo profits that they might otherwise attain at a discounted rate.¹⁰⁹ Therefore, the appropriate cost analysis is to compare the revenue

¹⁰¹ *Spirit*, 431 F.3d at 923.

¹⁰² Levine, *supra* note 27, at 448–49. Following deregulation, the airlines adopted a "spectacularly complicated fare structure," which permitted them to pursue all segments of the passenger market. *Id.*

¹⁰³ *Id.* at 449.

¹⁰⁴ *Id.*

¹⁰⁵ See OSTER & STRONG, *supra* note 11, at 23 ("[A]n airline would like to sell as many high fare seats as possible, selling the low fare seats only to fill seats that otherwise would have been empty.").

¹⁰⁶ AREEDA & HOVENKAMP, *supra* note 7, ¶ 740(b)(2).

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ *Id.* Professors Areeda and Hovenkamp provide the following illustration:

Suppose, for example, that use depreciation, fuel, crew, and other variable costs for running a ten-seat aircraft between two points total \$1000. The airplane has already

generated by the standby fare against the incremental cost of serving the low-fare passenger. As Professors Areeda and Hovenkamp explain, the standby fare involves "excess capacity and lower prices to marginal customers"¹¹⁰ and, therefore, the "theoretically correct benchmark is short-run marginal cost with respect to the low-price customers."¹¹¹

3. International Travel Arrangers v. Northwest Airlines: *The Eighth Circuit Rules that Standby Fares Are Non-Predatory*

The United States Court of Appeals for the Eighth Circuit has ruled that discounted standby fares are legal because they cover their passenger-variable cost.¹¹² In *International Travel*, Northwest Airlines was accused of predatory pricing in the summer of 1988 on flights between Minneapolis and seven cities in the United States.¹¹³ The plaintiff, International Travel Arrangers—a wholesale tour operator—supported its contention of predatory pricing by introducing evidence that Northwest had sold seats below cost.¹¹⁴ However, to reach this conclusion, International's expert only considered the lowest fares on these flights. He then took the total variable costs of flying the plane and divided that number by the total number of seats on the plane. This produced an AVC which showed that the discounted standby fares were priced below costs.¹¹⁵

The Eighth Circuit rejected International's cost analysis because a claim of predatory pricing could not be supported by merely considering the average variable cost of the lowest fares.¹¹⁶ Northwest's flights were composed primarily of high-fare passengers, and the remaining seats provided at discounted fares "might have been going out empty."¹¹⁷

sold seven tickets at \$150 each, so the flight is already profitable. It now has an opportunity to sell the three remaining seats for \$50 each. On the one hand, the seats are being sold for only half the average variable cost, which is \$100 per seat. On the other hand, the sale of the three seats is fully profitable to the airline. A rule condemning the discounted seats as predatory would force the airline inefficiently to fly with the three seats empty.

Id. (footnote omitted).

¹¹⁰ *Id.*

¹¹¹ AREEDA & HOVENKAMP, *supra* note 7, ¶ 740(b)(2).

¹¹² *Int'l Travel Arrangers v. NWA, Inc.*, 991 F.2d 1389, 1396 (8th Cir. 1993).

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ *Id.* at 1395.

¹¹⁶ *Id.*

¹¹⁷ *Id.* at 1396. For example, on at least two of the routes, Northwest sold the vast majority of its seats—as many as 68 and 72% of the seats onboard—at higher fares. *Int'l Travel*, 991 F.2d at 1395.

Therefore, the court correctly held that the discounted standby fares were legal because they covered the minimal incremental cost of filling an empty seat.¹¹⁸

B. Targeted Response to Entry

The targeted response to entry is distinguishable from the discounted standby fare because it involves a major airline's decision to increase capacity to capture the low-fare market. In *Spirit*, for example, Northwest added flights on the two city-pair routes and dramatically increased its number of low-fare seats to divert low-fare passengers away from Spirit. Northwest's pricing strategy yielded overall net profits on the two routes because it received revenue from both high-fare and low-fare passengers. But Spirit's experts showed that when a fact-finder only considers Northwest's low-fare passengers, it would appear that Northwest is pricing below its average variable cost. Therefore, Northwest is seemingly accepting losses in the passenger market where it faces competition, while cushioning these losses with revenue from markets not subject to the new price competition.

1. *The Economic Rationale of the Targeted Response to Entry: Increase Capacity to Divert Passengers Away from a Low-Fare Entrant*

A major airline engaging in a targeted response to entry is not using a yield management policy to use up excess capacity or to charge each individual passenger as close as possible to the maximum they are willing to pay.¹¹⁹ Rather, it is engaged in a deliberate campaign to divert passengers away from a low-fare entrant by making more seats available at lower prices.¹²⁰ Professor Alfred Kahn has referred to this type of targeted response as "discriminatory sharp-shooting."¹²¹ According to Kahn, Northwest is deliberately accepting losses in the markets where it is subject to competitive

¹¹⁸ *Int'l Travel*, 991 F.2d at 1396; see also AREEDA & HOVENKAMP, *supra* note 7, ¶ 740(b)(2). In evaluating this case, Professors Areeda & Hovenkamp concluded that the Eighth Circuit was correct in considering the incremental cost of filling the unsold seats, and not simply dividing variable costs by the total number of seats on the plane. *Id.*

¹¹⁹ See *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 923–24 (6th Cir. 2005). As noted, Northwest made significant fare cuts in response to Spirit's entry. *Id.*

¹²⁰ *Id.* at 952. Northwest not only lowered fares, but added capacity to accommodate a large number of passengers that would be diverted from Spirit. *Id.*

¹²¹ Dempsey, *supra* note 21, at 736. Professor Kahn is quoted in this article. He characterizes the response of major incumbents to new entry as discriminatory and targeted. *Id.*

challenge from the low-fare entrant.¹²² Kahn remarked, when commenting on Northwest's prior predatory response to People Express, that:

If predation means anything, it means deep, pinpointed, discriminatory price cuts by big companies aimed at driving price cutters out of the market, in order then to be able to raise prices back to their previous levels. I have little doubt that is what Northwest was and is trying to do. The tipoffs to me were two: one, that it substantially undercut the intruder's fare; two, it simultaneously increased the number of flights in this route.¹²³

An increase in capacity to divert low-fare passengers away from an entrant is crucial to an airline's predatory campaign. Without increasing capacity and providing more low-fare seats, a major airline may not be able to accommodate a sufficient number of low-fare passengers to force the entrant from the market.¹²⁴

2. The Law's Treatment of the Targeted Response to Entry: Legal Because the Airline Prices Above AVC on the Route as a Whole

Although major airlines are selectively accepting losses in the market in which they compete with a low-fare entrant, they can do so with impunity under the law because they are cushioning these losses with high fares that are not subject to competition.¹²⁵ Most courts evaluating predatory pricing in the airline industry adopt an AVC benchmark and determine whether the total number of passengers on a route, on average, are flying at prices above or below AVC. Therefore, even though the airline is not engaged in a profit-maximizing scheme by increasing both its capacity and proportion of low-fare passenger revenue,¹²⁶ the airline can remain profitable by utilizing its mix of high-fare passenger revenue.

Despite the fact that most passengers will gravitate toward the airline's lower fares during the predatory campaign,¹²⁷ the airline can still price above

¹²² *Id.*

¹²³ Klingaman, *supra* note 16, at 303–04. This quote is taken from a speech Professor Kahn gave on December 28, 1984. He is referring to Northwest's response to People Express at its Minneapolis/St. Paul hub. *Id.* at 303.

¹²⁴ See *Spirit*, 431 F.3d at 952 (“If Northwest simply lowered its price on its extant flights and did not add capacity, it is unlikely that a sufficiently large number of Spirit's passengers would be diverted and as a consequence drive Spirit from the market.”).

¹²⁵ Levine, *supra* note 27, at 452.

¹²⁶ See generally *United States v. AMR Corp.*, 335 F.3d 1109, 1112 (10th Cir. 2003).

¹²⁷ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, No. 00-71535, 2003 U.S. Dist. LEXIS 26831, at *71 (E.D. Mich. Mar. 31, 2003). The District Court stated that Northwest's

costs by using its economies of scale and combining passengers from various routes.¹²⁸ As Michael Levine explains, a significant percentage of the traffic on any given flight will “connect at the hub to or from somewhere other than the cities on the spoke where the new entry has occurred.”¹²⁹ Due to this connecting hub traffic, “a substantial amount of the revenue on each flight operated by the incumbent will not be subject to the price competition produced by the new entry.”¹³⁰ The high-fare connecting passengers provide “beyond revenue” for the flights at a very low cost—“perhaps even as low as the extra fuel cost and meals.”¹³¹ In this respect, major airlines such as Northwest can combine traffic on their low-fare flights as a way of fending off competition in their “Fortress Hubs.”¹³²

3. United States v. AMR Corp.: *The Tenth Circuit Rules that the Targeted Response to Entry Is Non-Predatory*

Although major airlines responding to entry at their hubs are not necessarily engaged in a profit-maximizing scheme, courts are unwilling to find them guilty of predatory pricing unless they are pricing below cost on the route as a whole.¹³³ For example, in *United States v. AMR Corp.*, the U.S. Department of Justice (DOJ) alleged that American Airlines (American) engaged in multiple episodes of predatory pricing in four city-pair markets, all connected to the airline’s hub at Dallas/Fort Worth International Airport

previously “bimodal” (a bifurcated fare structure with high-fare and low-fare passengers) fare distribution essentially collapsed during the predatory campaign, with “passengers naturally gravitating toward the airline’s lower yet mostly unrestricted fares.” *Id.*

¹²⁸ Edlin, *supra* note 26, at 943–44 n.12. Professor Edlin makes the same point about American Airline’s response to new entry. *See infra* text accompanying notes 136–37.

¹²⁹ Levine, *supra* note 27, at 452.

¹³⁰ *Id.*; see also Bradley H. Weidenhammer, Note, *Compatibility and Interconnection Pricing in the Airline Industry: A Proposal for Reform*, 114 YALE L.J. 405, 428–29 (2004). In his Note, Weidenhammer writes that low-fare entrants should in theory be able to compete for connecting hub traffic. Nevertheless, dominant hub airlines use their ability to manipulate consumer choice through discriminatory interconnection pricing. As a consequence, it is prohibitively expensive (as well as inconvenient) for a passenger to fly one leg of a flight with a major carrier and then switch over to a low-fare entrant. *Id.*

¹³¹ Edlin, *supra* note 26, at 943–44 n.12; see also *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, No. 00-71535, 2003 U.S. Dist. LEXIS 26831, at *17 (E.D. Mich. Mar. 31, 2003) (referring to the revenue generated by connecting passengers as “beyond revenue”).

¹³² Dempsey, *supra* note 21, at 689.

¹³³ *United States v. AMR Corp.*, 335 F.3d 1109, 1120 (10th Cir. 2003).

(DFW).¹³⁴ According to the DOJ, American responded to low-fare entrants with changes in: (1) pricing (matching/beating fares), and (2) capacity (adding flights or switching to larger planes).¹³⁵

One commentator, Professor Peter Edlin, observed that American's predatory response was financed in part by its ability to combine passengers from various routes.¹³⁶ For example, on a Dallas-Kansas City route in which it competed with Vanguard Airlines, a substantial portion of the passengers on American's flights were connecting passengers flying to Kansas City through Dallas, but originating in other cities such as Miami.¹³⁷ Thus, American was able to reduce fares and add capacity to displace its low-fare rivals, while retaining enough high-fare traffic to stay profitable on its routes.

The United States Court of Appeals for the Tenth Circuit ultimately rejected the government's predatory pricing claim because it was "uncontested" that American was pricing above AVC for the routes in question.¹³⁸ However, the DOJ—believing that the AVC test disguised the true nature of the predatory conduct—proposed an alternative pricing test to measure American's predatory response.¹³⁹ In particular, the DOJ proposed a test to measure the incremental revenue American received by adding new capacity to its routes against the avoidable costs of adding that capacity.¹⁴⁰ In other words, this test measured what costs American could have avoided by not adding the challenged capacity to the city-pair routes and compared that

¹³⁴ *Id.* at 1111.

¹³⁵ *Id.* at 1112; *see also* HOVENKAMP, *supra* note 53, at 349. Professor Hovenkamp explained that AMR pulled aircraft out of more profitable routes in order to place them in routes where they faced competition from smaller firms. *Id.*

¹³⁶ Edlin, *supra* note 26, at 943–44 n.12.

¹³⁷ *Id.*

¹³⁸ *AMR*, 335 F.3d at 1120.

¹³⁹ The crux of the DOJ's argument is that the "incremental" revenues and costs specifically associated with American's capacity additions show a loss. *Id.* at 1113–14. Therefore, the DOJ proposed four tests that purport to reliably measure incremental costs—the costs associated with the capacity additions at issue. *Id.* at 1116. Tests two and three were grouped together by the court as they sought to measure incremental cost by looking to whether American's internal cost-accounting measures became negative following the allegedly predatory capacity additions. However, the court pointed out that these internal accounting measures included many fixed costs that were not affected with increases in capacity. The court said that only variable costs should be considered. *Id.* at 1117. Test one measures the change in profitability after the capacity additions. However, the court rejected this test because rather than isolating the costs actually associated with the capacity additions, this test performs a "before and after" comparison of the route as a whole. *Id.* at 1119. The court devoted the most time to test four, which is discussed *infra* text accompanying notes 140–142.

¹⁴⁰ *Id.* at 1119–20.

to the incremental revenue it received from the capacity additions.¹⁴¹ However, the Tenth Circuit rejected this test because it would "involve a great deal of speculation" and may punish the airline for failing to maximize its profits, rather than pricing below costs.¹⁴²

C. The Law's Failure to Condemn the Targeted Response to Entry: Reconsidering the Predatory Pricing Doctrine

Despite the seemingly predatory response of dominant hub carriers such as Northwest and American Airlines, their actions have gone without censure under the antitrust laws.¹⁴³ These major airlines are pricing above costs on routes as a whole, but they are sacrificing profits and pricing low enough to drive out entrants. As Professor Edlin remarks: "If the law fails to recognize these low prices as predatory because they are above cost, consumers are the unambiguous losers."¹⁴⁴ Although consumers benefit in the short run as a major airline and low-fare entrant engage in a price war, the consumer ultimately suffers once the entrant is forced from the market and the major airline resumes monopoly pricing.¹⁴⁵

The difficulty in punishing unfair conduct in the airline industry has caused a great deal of criticism. There are many commentators who have called for a reexamination of the predatory pricing doctrine.¹⁴⁶ They argue that the antitrust laws, as currently administered and interpreted, do not draw

¹⁴¹ *Id.*

¹⁴² *Id.* at 1118; see also HOVENKAMP, *supra* note 53, at 349. Professor Hovenkamp believes that this holding is incorrect. He states that a test that "fails to include opportunity costs . . . is deficient, for no rational firm would embark on a strategy of transferring production from a more profitable to a less profitable product, unless there is more to the story." *Id.*

¹⁴³ Edlin, *supra* note 26, at 944. Indeed, since the Supreme Court decided *Brooke Group*, no predatory pricing plaintiff has prevailed in a final determination in the federal courts.

¹⁴⁴ *Id.* at 945.

¹⁴⁵ *Id.*

¹⁴⁶ See Dempsey, *supra* note 21, at 711. For example, Lewis Jordan, President and Chief Operating Officer of ValuJet, testified:

While ValuJet welcomes fair competition and does not seek to be insulated from such competition, we believe that no airline should be subjected to pricing actions designed to force it [out] of markets with the attendant likely consequences of fares immediately being restored to unnecessarily high levels. We urge a vigorous enforcement of the antitrust laws and reexamination of the predatory pricing doctrine to ensure fair competition for big and small carriers alike.

Id.

an adequate distinction between predation and vigorous competition.¹⁴⁷ An objective cost-based test may catch clear cases of below-cost pricing, but it permits major airlines to engage in unfair tactics without sanction. The next section discusses proposed alternatives to a below-cost rule. These proposed alternatives include qualitative assessments that consider intent as well as “dynamic” alternative standards for evaluating pricing claims.

IV. PROPOSED ALTERNATIVES: THE COURTS AND COMMENTATORS OFFER NEW TESTS FOR DETERRING THE TARGETED RESPONSE TO ENTRY

A below-cost test has been criticized for providing too strict a standard for distinguishing the “exceedingly thin line” between vigorous price competition and predatory pricing.¹⁴⁸ To remedy this concern, the circuit courts and commentators have proposed alternative tests for evaluating predatory pricing claims. These proposals include qualitative assessments of a major airline’s predatory intent, as well as a mandated price freeze to prevent drastic price cuts in response to entry.

This section will address two main proposals for altering the predatory pricing doctrine. Both proposals seek to promote consumer welfare by deterring major airlines from engaging in unfair pricing tactics in response to entry. However, these proposed alternatives to the Areeda and Turner below-cost test do not provide suitable alternatives for evaluating predatory pricing claims because they are not in keeping with the purpose of the antitrust laws.

A. Considering Predatory Intent: The Sixth Circuit Proposes a Qualitative Assessment

As discussed in Part One, Professors Areeda and Turner’s below-cost test set the benchmark for evaluating predatory-pricing complaints. The Supreme Court has not endorsed a definitive cost measure such as AVC, although it has set out general below-cost requirements.¹⁴⁹ The circuit courts

¹⁴⁷ Klingaman, *supra* note 16, at 303.

¹⁴⁸ *United States v. AMR Corp.*, 335 F.3d 1109, 1121 (10th Cir. 2003); *see also* *Ne. Tel. Co. v. Am. Tel. & Tel. Co.*, 651 F.2d 76, 88 (2d Cir. 1981) (“Predatory pricing is difficult to distinguish from vigorous price competition. Inadvertently condemning such competition as an instance of predation will undoubtedly chill the very behavior the antitrust laws seek to promote.”).

¹⁴⁹ *See supra* note 43 and accompanying text.

generally apply a below-cost standard as well, although there are several variations.¹⁵⁰

In *Spirit*, the Sixth Circuit embraced a “burden-shifting test” that uses a price-cost test to allocate the burden of proof.¹⁵¹ The Sixth Circuit held that the defendant, Northwest, could still be guilty of predation even though it had arguably priced above AVC on the two routes in question.¹⁵² To prove this claim, Spirit had the burden of showing that Northwest had the requisite predatory intent. The standard, according to the Sixth Circuit, is “what a rational firm would have expected its prices to accomplish.”¹⁵³ If the “anticipated benefits” of Northwest’s prices were to eliminate Spirit and later reap monopoly power, then Spirit could succeed on its claim even if Northwest priced above its costs.

1. *A Plaintiff’s Standard: Major Airlines Provide Abundant Evidence of Predatory Intent*

The intent-based standard proposed by the Sixth Circuit would certainly benefit plaintiffs in their prosecution of predatory pricing claims. Most major airlines engaged in a targeted response to entry will provide a plethora of evidence to support a finding of predatory intention. In *Spirit*, for example, there is no shortage of evidence to suggest that Northwest had the requisite predatory intent to drive Spirit from the market. Northwest’s conduct—which included dramatic price cuts and capacity increases—is revealing of a harmful intention. Spirit also averred that Northwest used its virtual stranglehold on gates in Detroit to block Spirit’s entry by charging

¹⁵⁰ As Russel Klingaman points out, the circuit courts that have decided predation cases can be divided into four categories: (1) courts that use a cost-based test (First and Second Circuits); (2) courts that use the cost-price relationship to allocate burdens of proof (Sixth, Eighth, Ninth, and Eleventh Circuits); (3) courts that focus on the totality of circumstances surrounding pricing strategies (Tenth Circuit); and (4) courts that use a two-step analysis consisting of (a) market structure and (b) pricing behavior (Seventh Circuit). Klingaman, *supra* note 16, at 299–302.

¹⁵¹ *Id.* at 300; see also *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 938 (6th Cir. 2005) (“If the defendant’s prices were below average total cost but above average variable cost, the plaintiff bears the burden of showing [that the] defendant’s pricing was predatory.”).

¹⁵² *Spirit*, 431 F.3d at 938.

¹⁵³ *Id.* The Sixth Circuit is adopting the standard set out by the Ninth Circuit in *William Inglis v. ITT Continental Baking Co.*, 668 F.2d 1014, 1034 (9th Cir. 1981). In that case, the Ninth Circuit held that a firm selling above average variable cost could still be guilty of predatory pricing if it believed its actions would have the effect of displacing a rival.

unreasonable fees.¹⁵⁴ In addition, there is direct evidence that Northwest's executives openly discussed a policy of eliminating smaller entrants. Internal documents unearthed by Spirit's lawyers showed that Northwest's executives considered Detroit Metro Airport to be the airline's "most unique strategic asset" that must be protected "at almost all costs."¹⁵⁵ Low-fare carriers such as Spirit could cost Northwest between \$250–375 million in annual revenue at its hubs. Thus, the strategy for Northwest was simple:

Match, or better yet, beat the new entrant's lowest restricted fare to confine its attractiveness to the leisure oriented price-sensitive sector of the market . . . Make sure enough seats are available on your flights in the market to accommodate increases in traffic caused by the fare war. In short, leave no traveler with either a price or a schedule incentive to fly the new entrant.¹⁵⁶

Finally, it is revealing that Northwest engaged in predatory campaigns before. Northwest's response to Spirit is not a one-time occurrence, but rather another battle in the war to drive entrants from the market.¹⁵⁷ One example includes Northwest's predatory tactics against People Express in the 1980s.¹⁵⁸ In that case, Northwest responded to People Express' entry into its Minneapolis/St. Paul hub by cutting regular fares by as much as sixty-four percent on a route in which it and People Express competed.¹⁵⁹

2. A Poor Indicator: Consideration of Intent Does Not Adequately Distinguish Predation from Aggressive Competition

While there may be ample evidence of Northwest's predatory intent, a finding of predatory pricing should not be founded on such a qualitative

¹⁵⁴ *Spirit*, 431 F.3d at 947. Spirit had great difficulty in acquiring gates at the Detroit Metro Airport. In the end, Spirit expended \$100,000 in gate fees to add its Detroit to Philadelphia flight. Spirit also paid a twenty-five percent higher landing fee than airlines that had leases with the Detroit airport authority.

¹⁵⁵ *Id.* at 929. This opinion was given by Northwest's Chief Executive Officer.

¹⁵⁶ *Id.* (alteration in original). Michael Levine, Northwest's executive vice president, provided this quote in an article published in 1987. Levine, *supra* note 27, at 476.

¹⁵⁷ See Dempsey, *supra* note 21, at 710. Both Vanguard and Sun Country complained to the Department of Transportation about the anti-competitive practices of Northwest.

¹⁵⁸ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 936 n.5 (6th Cir. 2005) ("Northwest drove another low fare carrier, People Express, out of the market by substantially undercutting People Express's price while simultaneously increasing the number of flights.").

¹⁵⁹ Klingaman, *supra* note 16, at 303. Northwest's regular coach fare was \$263. After People Express entered, Northwest dropped its fare to \$99.

assessment. At least one notable commentator believes that the consideration of subjective intent has "proved consistently to be the undoing of a rational predatory pricing policy."¹⁶⁰ An intent-based standard is flawed because it is a poor indicator for determining whether the defendant has engaged in predatory pricing. As the First Circuit explains, "'intent to harm' without more offers too vague a standard in a world where executives may think no further than 'Let's get more business.'"¹⁶¹ For example, Northwest's decision to cut prices and add capacity can be interpreted in one of two ways. It might reveal the airline's intention to displace a smaller rival. Without question, Northwest's response to Spirit's entry was a stark and deliberate departure from its prior pricing behavior on the two routes. But it might also be interpreted as evidence of a firm engaged in aggressive competition to meet a rival's lower price. Spirit presented a significant threat to Northwest's revenues, and it cannot be expected that Northwest would sit back idly as a new competitor captured the low-fare market.¹⁶²

In addition, an intent-based test would be inconsistent in its administration. Although a below-cost test may appear at times to be "overly rigid,"¹⁶³ it has the benefit of being a bright-line test easily applied.¹⁶⁴ A defendant engaged in a price war knows the line it must keep. However, with an intent-based test, it is not clear what advice a lawyer might give a "client firm considering procompetitive price-cutting tactics in a concentrated

¹⁶⁰ HOVENKAMP, *supra* note 53, at 346.

¹⁶¹ *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 232 (1st Cir. 1983); *see also Morgan v. Ponder*, 892 F.2d 1355, 1359 (8th Cir. 1989). In *Morgan*, the eighth Circuit noted the "futility in attempting to discern predatory conduct solely through evidence of a defendant's 'predatory intent.'" *Id.* For example, the court pointed to aggressive letters written by the defendant. The court explained such statements are often legitimately used by business people in the "heat of competition." Thus, these statements "provide no help in deciding whether a defendant has crossed the elusive line separating aggressive competition from unfair competition." *Id.*

¹⁶² *But see Areeda & Turner*, *supra* note 49, at 715. Professors Areeda and Turner do not provide a defense for a monopolist who prices below-cost in order to meet the price of a rival. That is, "meeting competition" is not a defense. Thus, if it was shown that Northwest was pricing below cost, Northwest could not successfully argue that its below-cost prices were permissible because they were necessary to compete with Spirit's low prices.

¹⁶³ *William Inglis v. ITT Cont'l Baking Co.*, 668 F.2d 1014, 1031 n.18 (9th Cir. 1981) ("The proper way to minimize all risks [associated with predatory pricing] is to eschew dogmatic adherence to a particular, rigid test and to fashion broad and flexible objective standards concerned with accurately evaluating the purposes of business behavior.").

¹⁶⁴ HOVENKAMP, *supra* note 53, at 346.

industry.”¹⁶⁵ Competition is a ruthless affair and it is inevitable that a vigorous, efficient firm will drive out its less-efficient rivals.¹⁶⁶

B. Institute a Price Freeze: A Proposal for Preventing Anti-Competitive Price-Cuts

In addition to an intent-based test proposed by the courts, several scholars have proposed alternative policy standards for circumventing the below-cost test.¹⁶⁷ According to these scholars, the Areeda and Turner below-cost test is a static model that does not consider dynamic conduct over time in response to entry and exit.¹⁶⁸ Monopolists, such as the major airlines, can utilize their distinct advantages to eliminate smaller competitors in the short run without violating a below-cost test.¹⁶⁹

To remedy the limited scope of the below-cost test, scholars have put forth dynamic standards for catching predatory conduct over the long-run.¹⁷⁰ One economist, Peter Edlin, has proposed a policy alternative specifically geared toward the problem of airline predation.¹⁷¹ Professor Edlin proposes that the major hub airlines be subject to a “price freeze” whenever a small, low-fare carrier enters their market.¹⁷² The price freeze would last twelve to eighteen months and would apply only to incumbent “monopoly” airlines

¹⁶⁵ *Barry Wright*, 724 F.2d at 235.

¹⁶⁶ *Arthur S. Langenderfer, Inc. v. S.E. Johnson Co.*, 729 F.2d 1050, 1056 (6th Cir. 1984) (“It is the very nature of competition that the vigorous, efficient firm will drive out less efficient firms. This is not proscribed by the antitrust laws.”).

¹⁶⁷ See OSTER & STRONG, *supra* note 11, at 18–19.

¹⁶⁸ Edlin, *supra* note 26, at 945 n.18.

¹⁶⁹ See OSTER & STRONG, *supra* note 11, at 18–19.

¹⁷⁰ See Patrick Bolton, Joseph F. Brodley, & Michael H. Riordan, *Predatory Pricing: Strategic Theory and Legal Policy*, 88 GEO. L.J. 2239, 2251–52 (2000). There was a sharp economic critique in response to the Areeda-Turner rule. Two notable examples include Oliver Williamson’s “output increase rule” and William Baumol’s “price reversal rule”:

Williamson found pricing conduct by a dominant firm predatory when the predator significantly increases output within twelve to eighteen months following entry into the market of a competing firm. The Baumol price reversal rule would deem a price predatory if it forced a rival to leave the market and the predator then reversed the price cut within the next several years.

Id.

¹⁷¹ Edlin, *supra* note 26, at 945–46.

¹⁷² *Id.* at 945. The price freeze would be limited to cases of “substantial” entry. *Id.* at 967. To qualify as a substantial entrant, a low-fare carrier would have to “price[] substantially below the incumbent and [have] the capacity or the prospect of supplying a substantial portion of the market.” *Id.*

with "substantial proven advantages."¹⁷³ The objective behind this proposal is to afford the smaller, less-advantaged carrier a reasonable amount of time to recover its entry costs and become viable. This would potentially level the playing field in the airline industry and promote more competitive prices for consumers.¹⁷⁴

1. Protecting Smaller Competitors: A Price Freeze Is Not in Keeping with the Purpose of the Antitrust Laws

Although Professor Edlin's policy proposal would be relatively easy to administer and may provide significant benefits for consumers, it is not in keeping with the purpose of the antitrust laws. The law seeks to protect competition and not competitors.¹⁷⁵ In this case, the proposed "price freeze" essentially ties the hands of larger firms and prevents them from meeting a new competitor's lower price. While predatory pricing has been a problem in the airline industry, it cannot be assumed that all major airlines will respond to entry with anti-competitive tactics. As previously discussed, the major airlines have an extremely fluid and complex fare structure that targets all sectors of the passenger market.¹⁷⁶ This multi-layered fare structure promotes market efficiency as the airlines use computerized inventory controls to respond competitively to a continuously changing consumer demand.¹⁷⁷ A price freeze incubator for the smaller airlines would obstruct the efficient workings of the airline industry and inevitably deter pro-competitive price

¹⁷³ *Id.* at 967-68. An incumbent monopoly airline has both cost advantages and non-cost advantages. *Id.* at 959. First, with respect to cost advantages, the incumbent airline has already sunk the expenditure and it may have lower variable costs. As for non-cost advantages, the airline's "product, quality, and brand name may be familiar to customers." *Id.* Furthermore, Professor Edlin distinguishes the pro-competitive versus anti-competitive means of preserving a monopoly. *Id.* at 966. He explains that attaining or preserving a monopoly by "charging prices lower than other firms' costs generally benefits consumers and is procompetitive." *Id.* However, a firm that preserves its monopoly by charging low prices "only when its rivals . . . enter[] the market, and only until they exit, denies consumers the benefits from competition on the merits." *Id.*

¹⁷⁴ *Id.* at 944.

¹⁷⁵ *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 224 (1993). The Supreme Court stated that it is "axiomatic that the antitrust laws were passed for 'the protection of competition, not competitors.'" (quoting *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962)). Imposing painful losses on competitors is "of no moment to the antitrust laws if competition is not injured." *Id.*

¹⁷⁶ See Levine, *supra* note 27, at 451.

¹⁷⁷ *Id.*

cuts.¹⁷⁸ Thus, a price freeze overreaches to protect smaller low-fare carriers without ensuring the protection of competition itself.

C. The Goal: Formulating a Test that Preserves Competition While Condemning Anti-Competitive Pricing

When fashioning a rule to evaluate the targeted response of major airlines to low-fare entry, courts and commentators should proceed with caution. It is important to adopt a rule that will condemn anti-competitive pricing, while still preserving competition. As the Supreme Court noted, "cutting prices in order to increase business often is the very essence of competition . . . mistaken inferences [of predatory pricing] . . . are especially costly, because they chill the very conduct the antitrust laws are designed to protect."¹⁷⁹ This overarching concern for the preservation of competition and lawful price cuts should win out in the airline industry as well. Although the forced departure of smaller airlines might engender feelings of sympathy and anger, these sentiments should not control the legal analysis. Rather, major airlines should be permitted to continue price-cutting so long as it is pro-competitive and above costs.

To address the targeted response to entry, an objective below-cost test should be utilized to condemn firms that are increasing their incremental costs without generating sufficient incremental revenue to cover these costs. As the next section points out, this analysis of incremental costs compared to incremental revenue relates to an airline's increase of capacity on routes in which it faces competition from a low-fare entrant.

V. STICKING WITH A BELOW-COST TEST: ADOPTING AN INCREMENTAL VARIABLE COST STANDARD

As discussed in previous sections, major airlines have used their dominant hub positions to block the entry of low-fare carriers. In *Spirit*, for example, Northwest engaged in a targeted strategy of capacity expansion and reduced fares to force Spirit from the market. The pattern of predation in *Spirit* reflects a growing trend of entry deterrence in the airline industry that occurs with impunity. Major airlines escape liability by cushioning their losses on low-fare flights with high-fares not subject to competition. This

¹⁷⁸ *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 235 (1st Cir. 1983). The First Circuit warned of the dangers of penalizing a "procompetitive price cut, perhaps the most desirable activity (from an antitrust perspective) that can take place in a concentrated industry." *Id.*

¹⁷⁹ *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 594 (1986) (quoted in *Cargill, Inc. v. Monfort of Colo., Inc.*, 479 U.S. 104, 122 n.17 (1986)).

predicament has caused several courts and commentators to reexamine the below-cost doctrine and propose alternative standards. However, I suggest in this section that the below-cost test should not be circumvented or abandoned. Rather, the test should apply to condemn firms that are adding to their cost structure by adding new capacity while subsidizing this cost increase from existing revenue sources. Specifically, I contend that the theoretically correct benchmark for evaluating the targeted response to entry is the "incremental variable cost."

A. The Areeda and Turner Test: Comparing Incremental Effects on Revenues and Costs

The principle underlying the Areeda and Turner below-cost test is that a rational and profit-maximizing firm will not increase output if the incremental revenue generated by that output does not cover its incremental costs.¹⁸⁰ In short, a firm considering increasing or decreasing its output will consider the "incremental effects on revenues and costs."¹⁸¹

This incremental cost principle manifests itself in a number of different cost benchmarks, depending on the circumstances. For example, when an airline offers discounted standby fares, the courts use "short-run marginal cost" as the standard. Once the airline has increased its output and sunk the bulk of its expenditures on certain flights, it has incentive to utilize any excess capacity. Thus, the correct benchmark is short-run marginal cost because the firm is covering the incremental cost of serving one additional passenger.

However, in the case of the targeted response to entry, the benchmark generally used is AVC. The purpose behind the AVC test is to determine whether a firm is pricing at a level that covers its incremental, or variable, changes in output. In *Spirit*, for example, both sides determined AVC by determining the total variable costs for each of the two routes in question. Total variable costs include the cost of continuing to fly existing flights on a route as well as the cost of adding new flights. Total variable cost is then divided by the total number of passengers on the route. This yields an average variable cost, which is then compared to the average price paid by the passengers. However, in *Spirit*, the two sides reached different conclusions because Spirit's experts only considered Northwest's low-fare passengers, while Northwest included all of its passengers. Therefore, Spirit argued that Northwest's low-fare passengers, on average, flew at prices below AVC. Northwest, on the other hand, averred that its total passenger segment, on average, flew above AVC.

¹⁸⁰ Areeda & Turner, *supra* note 49, at 701-02.

¹⁸¹ *Id.*

B. Proposing a New Benchmark: An “Incremental Variable Cost” Standard

I propose a new cost benchmark for evaluating a targeted response to entry, which I will refer to as the “incremental variable cost” standard. Utilizing this standard, a fact-finder would take the incremental variable costs associated with an airline’s addition of new flights on a route and determine whether the new flights are generating sufficient incremental revenue to cover its cost.¹⁸²

To conduct the test, a fact-finder would first ascertain the incremental variable cost that an airline incurs in adding a new flight(s) to a route.¹⁸³ This would include the costs of adding the additional aircraft(s),¹⁸⁴ incremental costs in fuel, incremental costs in crew, as well incremental passenger variable costs. The fact-finder would then consider what incremental passenger traffic this new flight(s) produces (that is, how many *new* passengers does the flight bring in). The fact-finder would then divide the

¹⁸² This proposed standard is similar in purpose to the alternative tests proposed by the government in *United States v. AMR Corp.*, 335 F.3d 1109 (10th Cir. 2003). See *supra* Part III.B.3. In that case, the court stated that the crux of the government’s argument “is that the ‘incremental’ revenues and costs specifically associated with American’s capacity additions show a loss.” *Id.* at 1113. However, my standard differs from the government’s proposed tests because I am comparing average revenue from the incremental passengers who travel on the capacity additions against an average of the *variable* costs of the capacity addition. The government, in one of its tests (test 4), proposed to compare incremental passenger revenue against “average *avoidable* cost.” *Id.* at 1119 (emphasis added). The court rejected this test because it would involve “a great deal of speculation” and it may punish a firm for failing to maximize profits rather than pricing below costs. *Id.* at 1118. It also rejected the three other tests the government proposed. See *supra* note 139. My standard, therefore, attempts to bridge the gap by isolating the variable costs associated with capacity additions (new flights added to a route) and comparing that to incremental revenue. Thus, my standard only seeks to punish a firm for the costs it spends, not for the costs it could have avoided.

¹⁸³ Compare to the AVC formula: a fact-finder takes the total variable cost on a route (for both existing flights and new flights), divides that sum by the total number of passengers on the route, and attains an AVC estimate. My proposed formula only considers the incremental variable costs associated with the new flights added to a route.

¹⁸⁴ Although an aircraft is generally considered a fixed equipment cost, the acquisition of a new aircraft would be a variable cost since it represents a change in output. See *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 940 (“[F]light [variable] costs include[] fuel and labor as well as the cost of the additional aircraft in each market that represent[s] the incremental capacity in Northwest’s response to Spirit’s presence.”). Additionally, pulling aircraft out of more profitable routes and placing them in competitive routes would be an opportunity cost. See HOVENKAMP, *supra* note 53, at 349. In fact, Northwest’s expert used “opportunity costs” for the new aircraft. See *supra* note 68.

incremental variable cost by the incremental passenger traffic, which would yield an average cost—similar to AVC.¹⁸⁵ That average would then be compared to the average price paid by the new passenger traffic. This formula would determine whether the airline is pricing above or below costs.

The purpose of an “incremental variable cost” standard is to evaluate whether a major airline is making a competitive and rational investment choice when increasing the number of its flights. The addition of new aircraft, as previously noted, is critical to a strategy of predatory pricing. If an airline merely reduces its fares and does not also increase its number of flights, it may not have enough capacity to divert a sufficiently large number of low-fare passengers away from an entrant to force it from the market.

In *Spirit*, for example, Northwest made an investment choice when it added a 289-seat DC-10 airplane to its Boston route. It was presumably increasing its cost to attract a greater number of low-fare passengers to its routes. Prior to *Spirit*’s entry, Northwest was operating around eight round-trip flights a day on this route.¹⁸⁶ To operate these eight flights, Northwest incurred the variable expenses of purchasing the fuel, paying its crew, and servicing the individual passengers who flew on these planes. But when it added the DC-10, it was adding more flights to the route, and consequently more variable costs to its payroll. It needed more fuel, more crew, and it would be servicing more passengers. Thus, it would need more incremental revenue to offset these new costs.

However, when Northwest invested in the DC-10, it would not have been rational for the firm to help finance the new aircraft by using passenger revenues currently generated by its existing flights. Rather, it would use a “price-out model forecast”¹⁸⁷ to ensure that the increased passenger traffic that the DC-10 would generate would cover the incremental cost of purchasing and operating the new aircraft.

¹⁸⁵ I will not refer to this quotient as AVC because AVC is defined as the quotient of total variable cost divided by the total number of units produced. In this case, I am not using total variable cost; rather, I am considering the incremental variable costs associated with a capacity addition.

¹⁸⁶ The number listed is actually 8.5. There is no mention in the *Spirit* decision about how many aircraft were on the route to operate these 8.5 flights a day.

¹⁸⁷ *Spirit*, 431 F.3d at 930. Any airline adding flights to a route will use sophisticated forecasts to determine the increase in passenger traffic. For, example, Northwest’s analysts attempted to justify the addition of the DC-10 by arbitrarily assuming a 362% increase in passenger traffic on the Detroit to Boston route. The court noted that this was “wholly contrary to Northwest’s price-out model forecast for these flights.” *Id.*

C. The Rational Investment Choice: Incremental Costs vs. Fully Allocated Costs

Professors Sullivan and Hovenkamp have characterized the rational investment choice as the difference between incremental costs versus fully allocated costs.¹⁸⁸ They provide a helpful (and somewhat humorous) example to illustrate this point. They use the example of a small store that sells only two items: milk and gasoline.

In this example, the milk requires a dairy refrigerator and the gasoline requires a tank. Both the refrigerator and the tank have fixed costs of \$10 a month. The store on average sells 100 gallons of both milk and gasoline, at a variable cost of \$1 per gallon. Thus, the “break even” price at which both the milk and gasoline are covering their fixed and variable cost is \$1.10.

Continuing further with this example, the store then decides to purchase a new refrigerator for the milk at an increased cost of \$20 a month. This new refrigerator is adding incremental costs to the store’s total cost structure. Thus, it might appear at first glance that the store would have to offset this new refrigerator cost by generating more revenue in both milk and gas. For example, it might raise the price of milk and gas to \$1.15 to cover the new costs, or it may produce a higher volume of the two products. If the store adopted this rationale, it would be using a “fully allocated cost” measure.¹⁸⁹ It would consider all costs that it encounters and average the total cost across its different products.

However, Sullivan and Hovenkamp assert that the fully allocated cost measure ignores the process by which a rational firm makes an investment choice. When purchasing the new refrigerator, the store would only consider the profits the new refrigerator would generate in milk. As they explain, a “firm contemplating a new refrigerator asks whether the *incremental* cost of the new equipment will be offset by the anticipated incremental revenue that the new equipment will produce.”¹⁹⁰ It would not be rational for the store to attribute part of the refrigerator cost to the gasoline because that product is already covering its costs. Otherwise, it would have to keep its gas prices at “artificially high” levels.¹⁹¹

¹⁸⁸ SULLIVAN & HOVENKAMP, *supra* note 3, at 785.

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

D. Focusing on the Capacity Increase: Applying an Incremental Variable Cost Standard to Evaluate the Targeted Response to Entry

The “milk and gas” example above lends support to the “incremental variable cost” standard. In the previous example, Sullivan and Hovenkamp stated that it would not be rational for the store to add a more expensive refrigerator for milk on the assumption that its gas revenue would help offset the costs. Similarly, an airline would not add a new flight to a route with the expectation that its existing passenger revenue would help offset the costs. The existing passenger revenue is already covering the costs generated by the currently operational aircraft, and the airline does not want to keep the existing revenue at an “artificially high” level to subsidize the new aircraft. Rather, the new flight would have to “pay its own way” by generating sufficient incremental passenger revenue to cover the new costs.

It is not clear how an “incremental variable cost” standard would affect the outcome in a case such as *Spirit*. This Note does not attempt to estimate Northwest’s incremental variable cost in relation to its incremental passenger revenue. However, it does not appear that Northwest was increasing its capacity to bring in additional high-fare passengers. Prior to Spirit’s entry, Northwest was presumably offering a schedule of flights that maximized its high-fare profits. And as previously noted, Northwest dramatically increased its proportion of low-fare seats in response to Spirit’s entry. For example, the number of low-fare seats Northwest sold in one quarter was over 35 times greater than what it had sold in the previous quarter.¹⁹² Thus, it would appear that Northwest was adding capacity to divert passengers away from Spirit, and not to attract new high-fare revenue. However, this predatory scheme would succeed under a route-wide average variable cost test because Northwest had enough high-fare revenue to offset its losses.

In response to such a predatory tactic, the “incremental variable cost” standard seeks to deter major airlines from adding capacity without generating sufficient incremental revenue to cover the capacity increase. The aim is to prevent airlines from escaping liability by simply combining passengers from various routes or financing its predatory investment in new capacity with existing high-fare revenue sources.

VI. CONCLUSION

The cost standard proposed in this Note shifts the focus of analysis to an airline’s capacity increase in response to entry. The limited scope of this standard has many advantages. It focuses on a crucial component of the

¹⁹² OSTER & STRONG, *supra* note 11, at 10. For a summary of Northwest’s increase in low-fare seats in one quarter alone, see *supra* note 40.

targeted response to entry. As previously mentioned, the addition of new capacity permits the major airline to capture a sufficient number of low-fare passengers to force an entrant from the market. If airlines are deterred from making a predatory investment in new capacity, it may reduce the number of new low-fare entrants that are forced from the market.

The incremental variable cost standard is also in keeping with the purpose of the antitrust laws, which is to protect competition and not competitors. It serves as an objective cost measure that evaluates the investment choices of major airlines. The standard does not base its analysis on the relevant passenger market of its smaller low-fare rival. Nor does it consider more subjective criteria, such as the airline's intention. Rather, it evaluates the airline's actions under the terms by which it actually competes in the market.

Finally, the incremental variable cost standard also has benefits in terms of its administration. Unlike the test proposed by Spirit, this standard does not pose any significant cost allocation problems. It compares an average of the incremental variable costs against an average of the new passenger fares produced by a capacity increase. Thus, it is an apples-to-apples comparison that links incremental revenue to its incremental costs.

Despite these benefits, this standard will surely invite criticism. Admittedly, this standard does not propose a reliable measure for separating out the incremental costs and revenues associated with a capacity increase. Such estimates will be difficult to measure with the "spectacularly complicated" fare structure in the airline industry.¹⁹³ Most flights carry a range of passenger fares, and it will not be easy to distinguish incremental from non-incremental revenue. However, despite these concerns, the overarching aim of this Note is to propose a new strategy for assessing predatory pricing among the major airlines. Capacity increases play a key role in the targeted response to entry, and a cost standard evaluating these investments may help to promote greater competition in the airline industry.

¹⁹³ Levine, *supra* note 27, at 448.

